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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

GUILL, RUSSELL L

ART UNIT

PAPER NUMBER

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/507,002	Applicant(s) BRACEWELL, ROBERT H	
	Examiner Russ Guill	Art Unit 2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 May 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-6,8,10,15,17-19,22,33,41,47,48 and 50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-6,8,10,15,17-19,22,33,41,47,48 and 50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 August 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office Action is in response to a Pre-Appeal Brief Request for Review dated May 27, 2008. The claims dated October 15, 2007 are examined.
2. Claims 1 – 2, 4 – 6, 8, 10, 15, 17 – 19, 22, 33, 41, 47 – 48 and 50 are pending. Claims 1 – 2, 4 – 6, 8, 10, 15, 17 – 19, 22, 33, 41, 47 – 48 and 50 have been examined. Claims 1 – 2, 4 – 6, 8, 10, 15, 17 – 19, 22, 33, 41, 47 – 48 and 50 have been rejected.
3. The Finality of the previous Office action is withdrawn after further consideration in a Pre-Appeal Brief Review. Examination is re-opened.

Claim Interpretations

4. Regarding claim 41, the claim is directed to a computer, which is a machine. A machine is defined by its structure, and since the claim does not appear to define any structure, any computer appears to satisfy the claim limitations. A computer is normally claimed as a system comprising a processor functionally connected to memory containing instructions.
5. Regarding claim 48, the claim is directed to a system, which is a machine. A machine is defined by its structure, and since the claim does not appear to define any structure, any computer appears to satisfy the claim limitations. Further, the claim recites a system “operable to” perform a method, but the phrase “operable to” appears to have an interpretation as an intended use, which has no patentable weight.
6. Regarding claim 50, the claim is directed to a system, which is a machine. A machine is defined by its structure, and since the claim does not appear to define any structure, any computer appears to satisfy the claim limitations. Further, the claim recites a system “operable to” perform a method, but the phrase “operable to” appears to have an interpretation as an intended use, which has no patentable weight.

Claim Rejections - 35 USC § 112

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

a. Claims **18 – 19, 33, 41, 47, 48, 50** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

i. Regarding **claim 18** and dependent claims, the claim recites, “the at least one predefined issue”. The phrase appears to have insufficient antecedent basis. For the purpose of claim examination, the phrase is interpreted as “a predefined issue”. Correction or amendment is required.

ii. Regarding **claim 33**, the claim recites in the last line, “said file”. The term appears to have insufficient antecedent basis. The phrase appears to mean, “said one of said files”. Dependent claims inherit the defects of the parent claims.

iii. Regarding **claim 41**, the claim recites a computer programmed according to the method described in claim 33. It is unclear whether the claim is directed to a machine or to the method of claim 33. Further, the meaning of a “computer programmed . . . according to the method of claim 33” is unclear.

iv. Regarding **claim 47**, the claim is directed to a data storage medium on which is stored a computer program according to claim 41. However, claim 41 is directed to a computer, rather than a computer program. The meaning of, “a computer program according to claim 41” is unclear.

v. Regarding **claim 48**, the claim recites a system operable to perform the method of claim 33. It is unclear whether the claim is directed to a

machine or to the method of claim 33. Further, the meaning of a "system operable . . . according to the method of claim 33" is unclear.

vi. Regarding **claim 50**, the claim recites a system operable to perform the method of claim 33. It is unclear whether the claim is directed to a machine or to the method of claim 33. Further, the meaning of a "system operable . . . according to the method of claim 33" is unclear.

Claim Rejections - 35 USC § 101

8. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

9. **Claims 47, 48 and 50** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

a. Regarding claim 47: While the claim recites a computer program stored on a data storage medium, a computer program allows the possibility of source code, which is non-functional descriptive material, and is thus non-statutory. A claim that has a non-statutory interpretation must be amended to have only statutory interpretations. A claim for a data storage medium should be recited in the spirit of a data storage medium on which is stored executable instructions which when executed by a processor perform a method comprising steps. Further, the parent claim does not appear to describe a computer program.

b. Regarding claim 48, none of the claim limitations appear to expressly or inherently require tangible physical components. An ordinary artisan interpreting the claim in light of the specification would reasonably interpret the

claim as encompassing a purely software system, which at best is functional material *per se*, and thus is non-statutory.

c. Regarding claim 50, none of the claim limitations appear to expressly or inherently require tangible physical components. An ordinary artisan interpreting the claim in light of the specification would reasonably interpret the claim as encompassing a purely software system, which at best is functional material *per se*, and thus is non-statutory.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. **Claims 1 – 2, 4 – 6, 8, 10, 15, 17, 18 – 19, 22, 33, 41, 47, 48, 50** are rejected under 35 U.S.C. 103(a) as being unpatentable over Conklin (Jeff Conklin et al.; “gIBIS: A Hypertext Tool for Exploratory Policy Discussion”, art provided by the Applicant on the Information Disclosure Statement dated December 22, 2004) in view of Hirose (U.S. Patent Number 5,784,286) further in view of Regli (W.C. Regli et al.; “A Survey of Design Rationale Systems: Approaches, Representation, Capture and Retrieval”, 2000, Engineering with Computers, Volume 16, pages 209 – 235).

a. The art of Conklin is directed to a design knowledge capture tool (unnumbered first page assumed to be page 303).

b. The art of Hirose is directed to a design knowledge capture tool (column 2, lines 65 - 67).

c. The art of Regli is directed to a design rationale capture tools (page 209, Abstract).

d. The art of Conklin and the art of Regli are analogous art because they are both directed to the art of a design knowledge capture tools.

e. The art of Conklin and the art of Hirose are analogous art because they are both directed to the art of a design knowledge capture tool.

f. Regarding **claim 1**:

g. Conklin appears to teach:

h. a storage means for storing design knowledge information generated or acquired during progress of a first design project, wherein the design knowledge information extends beyond product design information and includes information on evolution of a first design project and causal dependencies between items of said design knowledge (pages 304 - 305, section 2. THE IBIS METHOD, and page 305, figure 1; it would have been obvious that a storage means was used to store the information) said storage means comprising a plurality of records ~~files, each file~~ having a predefined knowledge structure for including a list of issues to be addressed (page 305, figure 1, box labeled "issue"; figure 1 displays an entity-relationship diagram, and the ordinary artisan would have known that elements of an entity-relationship diagram were stored as records with predefined structure);

i. an input means for allowing a user to input information into the storage means (page 308, figure 5, and explanatory text on page 307, fourth paragraph that starts with, "In this example . . .");

j. A presentation means for presenting a file template ~~of each of said plurality of files~~ to the user to allow the information to be input by the user in said predefined knowledge structure (page 308, figure 5, and explanatory text on page 307, fourth paragraph that starts with, "In this example . . .", and fifth paragraph; and page 306, figure 2), wherein said presentation means presents each said structure as an array of nodes, each node representing an item of said design knowledge (page 306, figure 2, left-side panel of the window displays an array of nodes, each node representing an item of knowledge design), wherein a dependency between items of said design knowledge is represented by a

directed link between selected nodes (page 306, figure 2, left-side panel of the window displays an array of nodes with links), ~~wherein said directed link is bi directional to permit a user to traverse the link in either direction,~~ and wherein said selected nodes represent items of design knowledge (page 306, figure 2, left-side panel of the window displays an array of nodes, each node representing an item of design knowledge) ~~stored in different files.~~

k. Conklin does not specifically teach:

l. said storage means comprising a plurality of ~~records~~ files, each file ~~having a predefined knowledge structure for including a list of issues to be addressed;~~

m. ~~A presentation means for presenting a file template~~ of each of said plurality of files ~~to the user to allow the information to be input by the user in said predefined knowledge structure, wherein said presentation means presents each said structure as an array of nodes, each node representing an item of said design knowledge, wherein a dependency between items of said design knowledge is represented by a directed link between selected nodes,~~ wherein said directed link is bi-directional to permit a user to traverse the link in either direction, ~~and wherein said selected nodes represent items of design knowledge stored in different files.~~

n. Hirose appears to teach:

o. presenting a file template of each of said plurality of files (figure 6A; it would have been obvious to the ordinary artisan to use multiple windows for a display).

p. said storage means comprising a plurality of ~~records~~ files, each file having a predefined knowledge structure (figure 5, elements stage records, focus records, sketch/drawing model, and column 7, lines 20 - 35 which recites three "stores") ~~for including a list of issues to be addressed~~

q. Regli appears to teach:

r. said storage means comprising a plurality of ~~records~~ files, each file having a predefined knowledge structure (page 213, figure 2, left-side box labeled "Design Repositories" contains a plurality of files, each file having a predefined knowledge structure).

s. design knowledge stored in different files (page 213, figure 2, left-side box labeled "Design Repositories" contains a plurality of files, each file having a predefined knowledge structure).

t. Official Notice is taken that it was well known at the time of invention in the analogous art of linking electronic documents that a directed link was bidirectional to permit a user to traverse the link in either direction. At the time of invention, it would have been obvious to the ordinary artisan to provide the limitation, "wherein said directed link is bi-directional to permit a user to traverse the link in either direction". The motivation would have been the major advantage that hyperlinks provide the ability to establish and maintain arbitrary associations between various stored documents. The following references are provided to support the Official Notice:

- i. Kogan (U.S. Patent Number 5,809,317) teaches bi-directional hyperlinks (*column 4, lines 35 - 55, and column 1, lines 65 - 67, and column 2, lines 1 - 2*);
- ii. Nguyen (U.S. Patent Number 5,481,666) teaches bi-directional hyperlinks (*column 4, lines 35 - 40*);
- iii. Harald Weinreich et al., "The Look of the Link - Concepts for the User Interface of Extended Hyperlinks", 2001, Proceedings of the 12th ACM conference on Hypertext and Hypermedia, pages 19 - 28; teaches bi-directional hyperlinks (*page 22, left-side column, section "Bi-directional Links"*);

- iv. Michael I. Hyman et al., "Visual C++ 5 for Dummies", 1997, IDG Books Worldwide, pages 51 and 61; teaches to display a file open menu, and a window with a list of files from which to select.
- u. The motivation to use the art of Hirose with the art of Conklin would have been the benefits recited in Hirose including a cost effective, useful and inexpensive design process recorder that benefits design and redesign (column 4, lines 9 - 20).
- v. The motivation to use the art of Regli with the art of Conklin would have been the benefit recited in Regli that keeping track of design rationale will provide a great aid to designers, and provides a basis for designers to explore more design options (page 209, right-side column, second paragraph that starts with, "Usually a developed . . .").
- w. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Hirose and the art of Regli and Official Notice with the art of Conklin to produce the claimed invention.
- x. Regarding claims 33, 41, 47, 48, 50:
- y. Conklin appears to teach:
 - z. A method for capturing design knowledge information wherein the information extends beyond product design information and includes information on evolution of a first design project and causal dependencies between items of design knowledge (page 305, figure 1; and page 306, figure 2);
 - aa. storing the information generated or acquired during progress of a first design project in a storage means (pages 304 - 305, section 2. THE IBIS METHOD, and page 305, figure 1; it would have been obvious that the information was stored), said storage means comprising a plurality of records ~~files, each file~~ having a predefined knowledge structure for including a list of issues to be addressed (page 305,

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figure 1, box labeled "issue"; figure 1 displays an entity-relationship diagram, and the ordinary artisan would have known that elements of an entity-relationship diagram were stored as records with predefined structure);

bb. ~~selecting one of said files and presenting a file template of each of said plurality of files to the user to allow the information to be input by the user in said predefined knowledge structure (page 308, figure 5, and explanatory text on page 307, fourth paragraph that starts with, "In this example . . .", and fifth paragraph; and page 306, figure 2), each structure being presented as an array of nodes, each node representing an item of said design knowledge (page 306, figure 2, left-side panel of the window displays an array of nodes, each node representing an item of knowledge design), wherein a dependency between items of said design knowledge is represented by a directed link between selected nodes (page 306, figure 2, left-side panel of the window displays an array of nodes with links), wherein said directed link is bi directional to permit a user to traverse the link in either direction, and wherein said selected nodes represent items of design knowledge (page 306, figure 2, left-side panel of the window displays an array of nodes, each node representing an item of design knowledge) stored in different files and inputting information into said file (page 308, figure 5, and explanatory text on page 307, fourth paragraph that starts with, "In this example . . .").~~

cc. Conklin does not specifically teach:

dd. ~~said storage means comprising a plurality of records files, each file having a predefined knowledge structure for including a list of issues to be addressed;~~

ee. ~~selecting one of said files and presenting a file template of each of said plurality of files to the user to allow the information to be input by the user in said predefined knowledge structure, each structure being presented as an array of nodes, each node representing an item of said design knowledge, wherein a dependency between items of said design knowledge is represented by a directed link between selected nodes, wherein said directed link is bi-directional to permit~~

a user to traverse the link in either direction, ~~and wherein said selected nodes represent items of design knowledge~~ stored in different files and ~~inputting information into said file;~~

ff. Hirose appears to teach:

gg. said storage means comprising a plurality of ~~records~~ files, each file having a predefined knowledge structure (figure 5, elements stage records, focus records, sketch/drawing model, and column 7, lines 20 - 35 which recites three "stores") ~~for including a list of issues to be addressed.~~

hh. presenting a file template of each of said plurality of files (figure 6A; it would have been obvious to the ordinary artisan to use multiple windows for a display).

ii. Regli appears to teach:

jj. said storage means comprising a plurality of ~~records~~ files, each file having a predefined knowledge structure (page 213, figure 2, left-side box labeled "Design Repositories" contains a plurality of files, each file having a predefined knowledge structure).

kk. design knowledge stored in different files (page 213, figure 2, left-side box labeled "Design Repositories" contains a plurality of files, each file having a predefined knowledge structure).

II. Official Notice is taken that it was old and well known by the ordinary artisan at the time of invention to select one of a plurality of files in the analogous art of software development. At the time of invention, it would have been obvious to an ordinary artisan to select one of a plurality of files as a design knowledge base. The motivation would have been the knowledge of the ordinary artisan that there would be more than one design knowledge base, and the application program of Conklin would need to select a knowledge base file to use. In support of the Official Notice, please refer to the reference, by Michael I. Hyman

et al., "Visual C++ 5 for Dummies", 1997, IDG Books Worldwide, pages 51 and 61 which display a file open menu and a list of files from which to select.

mm. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Hirose and the art of Regli and Official Notice with the art of Conklin to produce the claimed invention.

nn. Official Notice is taken that it was well known at the time of invention in the analogous art of linking electronic documents that a directed link was bidirectional to permit a user to traverse the link in either direction. At the time of invention, it would have been obvious to the ordinary artisan to provide the limitation, "wherein said directed link is bi-directional to permit a user to traverse the link in either direction". The motivation would have been the major advantage that hyperlinks provide the ability to establish and maintain arbitrary associations between various stored documents. The following references are provided to support the Official Notice:

- i. Kogan (U.S. Patent Number 5,809,317) teaches bi-directional hyperlinks (*column 4, lines 35 - 55, and column 1, lines 65 - 67, and column 2, lines 1 - 2*);
- ii. Nguyen (U.S. Patent Number 5,481,666) teaches bi-directional hyperlinks (*column 4, lines 35 - 40*);
- iii. Harald Weinreich et al., "The Look of the Link - Concepts for the User Interface of Extended Hyperlinks", 2001, Proceedings of the 12th ACM conference on Hypertext and Hypermedia, pages 19 - 28; teaches bi-directional hyperlinks (*page 22, left-side column, section "Bi-directional Links"*);

iv. Michael I. Hyman et al., "Visual C++ 5 for Dummies", 1997, IDG Books Worldwide, pages 51 and 61; teaches to display a file open menu, and a window with a list of files from which to select.

oo. Regarding **claim 2**:

pp. Conklin appears to teach:

qq. An interactive graph editor (page 306, figure 2).

rr. Regarding claim 4:

ss. Conklin appears to teach:

tt. in use, a user is prompted by the knowledge structure, to input at least one possible answer to at least one of said issues, the at least one possible answer being stored as one of the, or each, piece of information at the label of the node (page 307, last paragraph, extending on to page 308, and page 308, figure 5).

uu. Regarding claim 5:

vv. Conklin appears to teach:

ww. the knowledge structure prompts the user to input at least one argument that supports or refutes the possible answer, the at least one argument being stored as one of the, or each, piece of information at the label of the node (page 305, figure 1, especially the box labeled "argument", and page 307, last paragraph, extending on to page 308, and page 308, figure 5).

xx. Regarding claim 6:

yy. Conklin appears to teach:

zz. the at least one argument is classified as a supporting or a refuting argument (page 305, figure 1, especially the links labeled "supports" and "objects-to").

aaa. Regarding claim 8:

bbb. Conklin appears to teach:

ccc.said at least one argument is classified as a valid or an invalid argument (page 312, figure 11, graph config parameters, element "argument display bias").

ddd. Regarding claim 10:

eee. Conklin appears to teach:

fff. the at least one answer is classified as an open, an accepted or rejected answer (page 305, second paragraph; answers are open).

ggg. Regarding claim 15:

hhh. Conklin appears to teach:

iii. each node appears once only in the predefined file ~~plurality of files~~ (page 306, figure 2).

jjj. Conklin does not specifically teach:

kkk. A plurality of files.

lll. Regli appears to teach:

mmm.A plurality of files (page 213, figure 2, left-side box labeled "Design Repositories" contains a plurality of files).

nnn. Regarding claim 17:

ooo. Conklin does not specifically teach:

ppp. the, or each, node can be linked to an additional node on the same file.

qqq. Regli appears to teach:

rrr.the, or each, node can be linked to an additional node on the same file (page 224, section 6.1 Navigating Archived Design Rationale, and page 213, left-side column, third paragraphs, REMAP/MM [26] supports hyper-links; it would have been obvious that hyper-links could be linked to a node on the same file).

sss. Regarding claim 18:

ttt. Conklin appears to teach:

uuu. a sub-issue to the at least one predefined issue can be identified and input into the storage means (page 305, figure 1, links to the box "issue", labeled "REPLACES, QUESTIONS OR IS-SUGGESTED-BY").

vvv. Regarding claim 19:

www. Conklin appears to teach:

xxx.a user is prompted to input at least one possible answer to the sub-issue (page 307, last paragraph, extending on to page 308, and page 308, figure 5).

yyy. Regarding claim 22:

zzz. Conklin does not specifically teach:

aaaa. a processing means to identify at least one predefined issue addressed on a first design project, which issue is encountered on a subsequent design project.

bbbb. Regli appears to teach:

cccc. a processing means to identify at least one predefined issue addressed on a first design project, which issue is encountered on a subsequent design project (page 210, right-side column, last sentence, extending on to page 211, and page 224, section 6.1 Navigating Archived Design Rationale, and page 213, left-side column, third paragraphs, REMAP/MM [26] supports hyper-links; it would have been obvious that hyper-links could be linked to a node on a subsequent design project).

12. Examiner's Note: Examiner has cited particular columns and line numbers in the references applied to the claims above for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to specific limitations within the individual claim, other passages and figures may apply

as well. It is respectfully requested from the Applicant in preparing responses, to fully consider the references in their entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner. *The entire reference is considered to provide disclosure relating to the claimed invention.*

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russ Guill whose telephone number is 571-272-7955. The examiner can normally be reached on Monday – Friday 9:30 AM – 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached on 571-272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Any inquiry of a general nature or relating to the status of this application should be directed to the TC2100 Group Receptionist: 571-272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Russ Guill
Examiner
Art Unit 2123

RG

/Paul L Rodriguez/
Supervisory Patent Examiner,
Art Unit 2123

